Capstone Project My Aadhar Application

Sprints

<u>Sprint1</u>

Creating the basic setups for the backend .And performing the backend operations with spring boot with MySQL create the required tables. <u>Sprint2</u>

Creating the basic setups for the frontend using angular, connecting the backend to the front end to display the outcome of each operation *Sprint3*

Writing a testng script to perform valid test cases and automate it using jenkins *Sprint4*

Deploying spring boot project.jar file in AWS instance, and dockerisng the image even automating the dockerisation using jenkins and upload the docker image to docker hub.

FrontEnd

Service.ts

```
import { HttpClient } from '@angular/common/http';
import { Injectable } from '@angular/core';
import { Observable } from 'rxjs';
import { UserDetails } from 'src/classes/details';
import { Logincred } from 'src/classes/logincredentials';
import { RegisterUser } from 'src/classes/registercred';

@Injectable({
   providedIn: 'root'
})
export class AllserviceService {

   private backednURL="http://localhost:8080/citizen";
   constructor(private http:HttpClient) { }

   Logincred():Observable<Logincred[]> {
```

```
return this.http.get<Logincred[]>(`${this.backednURL}/userLogin`);
 viewDetails():Observable<UserDetails[]>{
this.http.get<UserDetails[]>(`${this.backednURL}/viewDetails`);
adduser(name:string,dob:string,address:string,emailid:string,phno:numbe
r,gender:string,):Observable<UserDetails> {
newuser:UserDetails={name:name,dob:dob,address:address,emailid:emailid,
phno:phno,gender:gender);
this.http.post<UserDetails>(`${this.backednURL}/addCitizen`,newuser)
  registeruser(emailid:string,pwd:string):Observable<RegisterUser>{
    const register:RegisterUser={emailid:emailid,pwd:pwd};
this.http.post<RegisterUser>(`${this.backednURL}/userRegister`,register
  registeredusers():Observable<RegisterUser[]>{
this.http.get<RegisterUser[]>(`${this.backednURL}/getUsers`);
 removeuser(phno:number):Observable<UserDetails>{
this.http.delete<UserDetails>(`${this.backednURL}/Dismiss/${phno}`);
```

<u>UserDetails</u>

```
export class UserDetails {
   name:string;
   dob:string;
   address:string;
   emailid:string;
   phno:number;
   gender:string;
   constructor(name:string
,dob:string,address:string,emailid:string,phno:number,gender:string) {
```

```
this.name=name; this.dob=dob; this.address=address; this.emailid=emailid; t
his.phno=phno; this.gender=gender;
}
```

BackEnd

Controller.java

package com.sec.controller;

import java.util.List;
import java.util.Optional;

import org.springframework.beans.factory.annotation.Autowired; import org.springframework.http.MediaType; import org.springframework.web.bind.annotation.CrossOrigin; import org.springframework.web.bind.annotation.GetMapping; import org.springframework.web.bind.annotation.PathVariable; import org.springframework.web.bind.annotation.PostMapping; import org.springframework.web.bind.annotation.RequestBody; import org.springframework.web.bind.annotation.RequestMapping; import org.springframework.web.bind.annotation.RestController;

```
import com.sec.service.*;
import com.sec.repo.*;

@RestController
@RequestMapping("/citizen")
@CrossOrigin()
public class MainController {
```

import com.sec.entity.*;

@AutowiredAdminservice ads;

@AutowiredUserservice urs;

Userrepo up;

```
@GetMapping(value="/userLogin", consumes =
MediaType.APPLICATION JSON VALUE)
      public String userLogin(@RequestBody Usercredentials u){
            return urs.login(u.getEmailid(), u.getPwd());}
      @GetMapping(value="/getUsers",produces=
MediaType.APPLICATION_JSON_VALUE)
      public List<Usercredentials> viewusers(){
            return urs.viewusers();}
      @PostMapping(value="/userRegister", consumes =
MediaType.APPLICATION JSON VALUE)
      public String userRegiter(@RequestBody Usercredentials u){
            return urs.userRegister(u);}
      @PostMapping(value="/addCitizen", consumes =
MediaType.APPLICATION JSON VALUE)
      public String addCitizen(@RequestBody UserEntity u){
                  return ads.addcitizen(u);}
@GetMapping(value="/Dismiss/{phno}",produces=MediaType.APPLICATION JSO
N VALUE)
      public String dismisscitizen(@PathVariable("phno") long phno) {
            return ads.removecitizen(phno);
      }
      @GetMapping(value="/viewDetails", produces=
MediaType.APPLICATION JSON VALUE)
      public List<UserEntity> viewAll(){
            return ads.viewall();}
}
Testclasses.java
package com.test;
import org.testng.annotations.Test;
import org.testng.AssertJUnit;
import org.testng.annotations.Test;
```

```
import org.openqa.selenium.*;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.interactions.Actions;
import org.testng.annotations.BeforeSuite;
import org.testng.Assert;
import org.testng.annotations.AfterSuite;
public class Aadhartest {
      public WebDriver driver;
      public String testURL="http://localhost:8080/citizen/";
 @Test
 public void logintest() {
       driver.get(testURL + "login");
       WebElement uname=driver.findElement(By.id("phoneNumber"));
       uname.sendKeys("admin1");
       WebElement pwd=driver.findElement(By.id("password"));
       pwd.sendKeys("admin01");
       WebElement
btn=driver.findElement(By.xpath("/html/body/app-root/app-login/div/div[1]/div/div/di
v/form/button"));
       btn.click();
 }
 @Test
 public void admindashboardtest() {
       driver.get(testURL+"admin");
       WebElement
addusnbtn=driver.findElement(By.xpath("/html/body/app-root/app-admin/div/a"));
       addusnbtn.click();
       WebElement name=driver.findElement(By.id("name"));
       WebElement dob=driver.findElement(By.id("dob"));
       WebElement address=driver.findElement(By.id("address"));
       WebElement emailed=driver.findElement(By.id("emailed"));
       WebElement phno=driver.findElement(By.id("phno"));
       WebElement gender=driver.findElement(By.id("gender"));
       WebElement
addbtn=driver.findElement(By.xpath("/html/body/app-root/app-adduser/div/form/butt
on"));
```

```
name.sendKeys("AB");dob.sendKeys("23");address.sendKeys("KA");emailid.sendKe
ys("cv@gm.com");phno.sendKeys("8520");gender.sendKeys("M");
       addbtn.click();
       Alert alert=driver.switchTo().alert();
       AssertJUnit.assertEquals(alert.getText(), "AB has been Added");
       alert.accept();
 }
 @Test
 public void scrolltest() {
       driver.get(testURL+"admin");
       Actions scrollpage=new Actions(driver);
scrollpage.sendKeys(Keys.PAGE DOWN).sendKeys(Keys.PAGE DOWN).pause(20
00).sendKeys(Keys.PAGE UP).build().perform();
 }
 @Test
 public void userpagetest() {
       driver.get(testURL+"userpage");
       WebElement btn1=driver.findElement(By.xpath(""));
       btn1.click();
       Alert alert=driver.switchTo().alert();
       AssertJUnit.assertEquals(alert.getText(), "Request Sent! You will hear from us
soon");
       alert.accept();
        WebElement btn2=driver.findElement(By.xpath(""));
       btn2.click();
       Alert alert2=driver.switchTo().alert();
       AssertJUnit.assertEquals(alert2.getText(), "Your Update request has been
sent");
       alert.accept();
 @BeforeSuite
 public void beforeSuite() {
System.setProperty("webdriver.chrome.driver","C:\\Users\\Swaroop\\Desktop\\Eclipse
Workspace\\Application-test-aadhar\\chromedriver.exe");
       driver= new ChromeDriver();
```

```
}
@AfterSuite
public void afterSuite() {driver.close();}
}
```

Application.properties

Jenkins Pipeline

```
pipeline{
  agent any
  tools {
             // Install the Maven version configured as "M3" and add it to the path.
             maven "default"
             //jdk "java1"
       }
  stages {
     stage('Maven Build') {
       steps {
         dir('C:/Users/Swaroop/Desktop/EclipseWorkspace/Backend-aadhar') {
                           bat "mvn -Dmaven.test.skip=true clean package"
                           }
    }
    stage('Docker Image Creation') {
       steps {
         dir('C:/Users/Swaroop/Desktop/EclipseWorkspace/Backend-aadhar') {
                           bat "docker build -t taxi --output type=docker ."
                           }
       }
```

```
stage('Docker Hub Push') {
    steps {
        bat "docker tag taxi swaroopav21/capstone"
        bat "docker push swaroopav21/capstone"
    }
}
```

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 Backend-aadhar [boot]
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 // src/main/java
 - > # com.sec
 - > 🔠 com.sec.controller
 - # com.sec.entity
 - > 🛭 AdminEntity.java
 - > 🗓 Usercredentials.java
 - UserEntity.java
 - > # com.sec.repo
 - > # com.sec.service
 - > # src/main/resources
 - > 乃 src/test/java
 - > March JRE System Library [JavaSE-17]
 - > Maven Dependencies
 - > 🔝 src
 - > 🗁 target
 - HELP.md
 - mvnw
 - mvnw.cmd

- v 🔀 Application-test-aadhar
 - - √

 ⊕ com.test
 - > 🛭 Aadhartest.java
 - > # src/main/resources
 - > **#** src/test/java
 - > # src/test/resources
 - > A JRE System Library [JavaSE-17]
 - > Maven Dependencies
 - > # target/generated-sources/annotations
 - > # target/generated-test-sources/test-annotations
 - > 🗁 src
 - > 🗁 target
 - > 🗁 test-output
 - chromedriver.exe
 - Dockerfile
 - Jenkins.txt
 - m pom.xml
 - 🗎 selenium-server-4.10.0.jar

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TS register.compone...